UNKNIOWN MULTIPLE REPORT PROJECT 10073 RECORD CARD

1. DATE  31 Aug 60  3. DATE-TIME GROUP  Local 1930  GMT 31/0935Z  5. PHOTOS	2. LOCATION   Vicinity Yokohama, Japan   4. TYPE OF OBSERVATION   Ground-Visual   Ground-Rodar   D Air-Visual   D Air-Intercept Rodar   3. SOURCE   not given		12. CONCLUSIONS    Was Balloon   Probably Balloon   Possibly Balloon   Probably Aircraft   Probably Aircraft   Possibly Aircraft   Possibly Aircraft   Possibly Aircraft   Possibly Astronomical   Pos
☐ Yes ☐ No			
7. LENGTH OF OBSERVATION not given	One	2. COURSE East	Other Echo I .  Insufficient Data for Evaluation Unknown
10. BRIEF SUMMARY OF SIGHTING		11. COMMENTS	
Bright object, as bright as first magnitude star. Course was estimated to be 080° T.		Several reports were received from this part of the world, and the description in each instance is almost identical.  Description has all the characteristics of the satellite Echo I.	

ATTC PORM 329 (REV 26 SEP 52)

## Echo Timetable

Echo I satellite will be visible today at 8:03 p.m., in the north, 63 degrees above the horizon moving in a northeasterly direction; at 10:08 p.m. in the north, 57 degree above the horizon moving in a southeasterly direction; tomorrow at 12:15 a.m. in the south, 87 degrees above the horizon moving in a southeasterly direction and at 2:25 a.m. in the south, 16 degrees above the horizon moving in a southeasterly direction and at 3:25 a.m. in the south, 16 degrees above the horizon moving in a southeasterly direction.

## Trip In Shadows Seen Having No Effect On Echo

WASHINGTON, Aug. 28—(UPI)
—Project Echo officials reported today that the balloon satellite has suffered no ill effects from its quick trips through the Earth's shadow.

The satellite, launched Aug. 12. is now beginning to move more and more into the shadow, bringing on a temperature change that some feared might affect the celophane-thin balloon.

But a spokesman for the national aeronautics and space administration (NASA) said that up to now the shadow hasn't meant a thing to Echo's orbit.

The balloon passes through the shadows for only four or five minutes of the 118 minutes it takes to orbit the Earth. It will continue going into the shadow for longer periods, but even at its maximum in December it will stay in darkness only 30 minutes

What happens then is anyone's guess. The NASA spokesman said one of the purposes of the Echo experiment is to find out.

The four-minute journeys through the Earth's shadow now have little effect on visual sightings, since Echo can be seen for a period of 10 minutes over every point it passes.

magnitude star, on bearing of 330 degrees true at 38 degrees elevation. Objects course was estimated to be 080 degrees true. At 1932I object appeared coincident with pole star. Object was last seen at 1913I at bearing of 058 degrees true at elevation of 10 degrees.